§61.105

- (2) If the facility is under a judicial or administrative enforcement decree the report will describe the facilities performance under the terms of the decree.
- (d) The first report will cover the emissions of calendar year 1990.

§61.105 Recordkeeping requirements.

The owner or operator of any facility must maintain records documenting the source of input parameters including the results of all measurements upon which they are based, the calculations and/or analytical methods used to derive values for input parameters, and the procedure used to determine compliance. This documentation should be sufficient to allow an independent auditor to verify the accuracy of the determination made concerning the facility's compliance with the standard, and, if claimed, qualification for exemption from reporting. These records must be kept at the site of the facility for at least five years and upon request be made available for inspection by the Administrator, or his authorized representative.

§61.106 Applications to construct or modify.

- (a) In addition to any activity that is defined as construction under 40 CFR part 61, subpart A, any fabrication, erection or installation of a new building or structure within a facility is also defined as new construction for purposes of 40 CFR part 61, subpart A.
- (b) An application under §61.07 does not need to be filed for any new construction of or modification within an existing facility if one of the following conditions is met:
- (1) The effective dose equivalent calculated by using methods described in §61.103, that is caused by all emissions from the facility including those potentially emitted by the proposed new construction or modification, is less than 10% of the standard prescribed in §61.102.
- (2) The effective dose equivalent calculated by using methods described in §61.103, that is caused by all emissions from the new construction or modification, is less than 1% of the limit prescribed in §61.102. A facility is eligible for this exemption only if the facility,

based on its last annual report, is in compliance with this subpart.

§61.107 Emission determination.

- (a) Facility owners or operators may, in lieu of monitoring, estimate radionuclide emissions in accordance with appendix D, or other procedure for which EPA has granted prior approval.
- (b) Radionuclide emission rates from point sources (e.g. stacks or vents) shall be measured in accordance with the following requirements:
- (1) Effluent flow rate measurements shall be made using the following methods:
- (i) Reference Method 2 of appendix A to part 60 shall be used to determine velocity and volumetric flow rates for stacks and large vents.
- (ii) Reference Method 2A of appendix A to part 60 shall be used to measure flow rates through pipes and small vents.
- (iii) The frequency of the flow rate measurements shall depend upon the variability of the effluent flow rate. For variable flow rates, continuous or frequent flow rate measurements shall be made. For relatively constant flow rates only periodic measurements are necessary.
- (2) Radionuclides shall be directly monitored or extracted, collected, and measured using the following methods:
- (i) Reference Method 1 of appendix A part 60 shall be used to select monitoring or sampling sites.
- (ii) The effluent stream shall be directly monitored continuously using an in-line detector or representative samples of the effluent stream shall be withdrawn continuously from the sampling site following the guidance presented in ANSIN13.1-1969 "Guide to Sampling Airborne Radioactive Materials in Nuclear Facilities" (including the guidance presented in appendix A of ANSIN13.1) (incorporated by reference—see §61.18). The requirements for continuous sampling are applicable to batch processes when the unit is in operation. Periodic sampling (grab samples) may be used only with EPA's prior approval. Such approval may be granted in cases where continuous sampling is not practical and radionuclide emission rates are relatively constant. In such cases, grab samples

shall be collected with sufficient frequency so as to provide a representative sample of the emissions.

- (iii) Radionuclides shall be collected and measured using procedures based on the principles of measurement described in appendix B, Method 114. Use of methods based on principles of measurement different from those described in appendix B, Method 114 must have prior approval from the Administrator. EPA reserves the right to approve alternative measurement procedures in whole or in part.
- (iv) A quality assurance program shall be conducted that meets the performance requirements described in appendix B, method 114.
- (3) When it is impractical to measure the effluent flow rate at an existing source in accordance with the requirements of paragraph (b)(1) of this section or to monitor or sample an effluent stream at an existing source in accordance with the site selection and sample extraction requirements of paragraph (b)(2) of this section, the facility owner or operator may use alternative effluent flow rate measurement procedures or site selection and sample extraction procedures provided that:
- (i) It can be shown that the requirements of paragraphs (b) (1) and (2) of this section are impractical for the effluent stream.
- (ii) The alternative procedure will not significantly underestimate the emissions.
- (iii) The alternative procedure is fully documented.
- (iv) The owner or operator has received prior approval from EPA.
- (4)(i) Radionuclide emission measurements in conformance with the requirements of paragraph (b) of this section shall be made at all release points which have a potential to discharge radionuclides into the air in quantities which could cause an effective dose equivalent in excess of 1% of the standard. All radionuclides which could contribute greater than 10% of the potential effective dose equivalent for a release point shall be measured. For other release points which have a potential to release radionuclides into the air, periodic confirmatory measurements should be made to verify the low emissions.

- (ii) To determine whether a release point is subject to the emission measurement requirements of paragraph (b) of this section, it is necessary to evaluate the potential for radionuclide emissions for that release point. In evaluating the potential of a release point to discharge radionuclides into the air, the estimated radionuclide release rates shall be based on the discharge of the uncontrolled effluent stream into the air.
- (5) Environmental measurements of radionuclide air concentrations at critical receptor locations may be used as an alternative to air dispersion calculations in demonstrating compliance with the standards if the owner or operator meets the following criteria:
- (i) The air at the point of measurement shall be continuously sampled for collection of radionuclides.
- (ii) Those radionuclides released from the facility, which are the major contributors to the effective dose equivalent must be collected and measured as part of the environmental measurements program.
- (iii) Radionuclide concentrations which would cause an effective dose equivalent greater than or equal to 10% of the standard shall be readily detectable and distinguishable from background.
- (iv) Net measured radionuclide concentrations shall be compared to the concentration levels in table 2 of appendix E to determine compliance with the standard. In the case of multiple radionuclides being released from a facility, compliance shall be demonstrated if the value for all radionuclides is less than the concentration level in table 2 and the sum of the fractions that result when each measured concentration value is divided by the value in table 2 for each radionuclide is less than 1.
- (v) A quality assurance program shall be conducted that meets the performance requirements described in appendix B, method 114.
- (vi) Use of environmental measurements to demonstrate compliance with the standard is subject to prior approval of EPA. Applications for approval shall include a detailed description of the sampling and analytical

§61.108

methodology and show how the above criteria will be met.

- (c) The following facilities may use either the methodologies and quality assurance programs described in paragraph (b) of this section or may use the following:
 - (1) [Reserved]
- (2) Uranium mills may determine their emissions in conformance with the Nuclear Regulatory Commission's Regulatory Guide 4.14 dated April 1980. In addition, they may conduct a quality assurance program as described in the Nuclear Regulatory Commission's Regulatory Guide 4.15 dated February 1979.

[54 FR 51697, Dec. 15, 1989, as amended at 61 FR 46212, Sept. 5, 1995; 61 FR 68981, Dec. 30, 1996]

§61.108 Exemption from the reporting and testing requirements of 40 CFR 61.10.

All facilities designated under this subpart are exempt from the reporting requirements of 40 CFR 61.10.

Subpart J—National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene

SOURCE: $49 \, \mathrm{FR} \, 23513$, June 6, 1984, unless otherwise noted.

§61.110 Applicability and designation of sources.

- (a) The provisions of this subpart apply to each of the following sources that are intended to operate in benzene service: pumps, compressors, pressure relief devices, sampling connections, systems, open-ended valves or lines, valves, flanges and other connectors, product accumulator vessels, and control devices or systems required by this subpart.
- (b) The provisions of this subpart do not apply to sources located in coke by-product plants.
- (c)(1) If an owner or operator applies for one of the exemptions in this paragraph, then the owner or operator shall maintain records as required in §61.246(i).
- (2) Any equipment in benzene service that is located at a plant site designed

to produce or use less than 1,000 megagrams of benzene per year is exempt from the requirements of §61.112.

- (3) Any process unit (defined in §61.241) that has no equipment in benzene service is exempt from the requirements of §61.112.
- (d) While the provisions of this subpart are effective, a source to which this subpart applies that is also subject to the provisions of 40 CFR part 60 only will be required to comply with the provisions of this subpart.

§61.111 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act, in subpart A of part 61, or in subpart V of part 61, and the following terms shall have the specific meanings given them:

In benzene service means that a piece of equipment either contains or contacts a fluid (Liquid or gas) that is at least 10 percent benzene by weight as determined according to the provisions of §61.245(d). The provisions of §61.245(d) also specify how to determine that a piece of equipment is not in benzene service.

Semiannual means a 6-month period; the first semiannual period concludes on the last day of the last month during the 180 days following initial startup for new sources; and the first semiannual period concludes on the last day of the last full month during the 180 days after June 6, 1984 for existing sources.

§61.112 Standards.

- (a) Each owner or operator subject to the provisions of this subpart shall comply with the requirements of subpart V of this part.
- (b) An owner or operator may elect to comply with the requirements of §§ 61.243-1 and 61.243-2.
- (c) An owner or operator may apply to the Administrator for a determination of an alternative means of emission limitation that achieves a reduction in emissions of benzene at least equivalent to the reduction in emissions of benzene achieved by the controls required in this subpart. In doing so, the owner or operator shall comply with requirements of §61.244.